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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/623,840	09/28/2001	Helke Lob	40265/DBP/E4	8102

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EXAMINER

ROJAS, BERNARD

ART UNIT	PAPER NUMBER
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2832

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/623,840	Applicant(s) LOB, HELKE	
	Examiner BERNARD ROJAS	Art Unit 2832	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-18 and 20-22 is/are rejected.
- 7) ☐ Claim(s) 19 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>09082000 09282001</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the shaped body in the form of a compressibly shock-absorbing foot well lining of claim 12 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the

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applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 4-10, 12, 17-18, and 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over McMillan et al. (US 4,639,710) in view of Ju, Sung Ho (WO 95/27237).

Claim 1, McMillan et al. (4,639,710) discloses an actuating apparatus (foot pedal, Col. 1, lines 22-25) comprising a signal converter (Fig. 6, 10) which produces a control signal dependent on the actuating travel, characterized in that the signal converter (10) comprises an elastic and conductive shaped body (58) having a first (top of 58) and a second outside (bottom of 58) surface which are arranged at a spacing relative to each other, which is provided with a first electrical contact region (60) which extends over the first outside surface of the shaped body and which is galvanically conductively connected on the one hand to the shaped body and on the other hand to a first feed line (A) and a second electrical contact region (56) which extends along the second surface of the shaped body and is galvanically conductively connected on the one hand to the shaped body and on the other hand to a second feed line (B), wherein the electrical

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resistance of the shaped body between the two contact regions (60 and 56) is dependent on the spacing of the two contact regions and that connected downstream of the signal converter is a measurement transducer (control box not shown, see Col. 3, lines 46-52 and Col. 5, lines 12-25) whose inputs are connected by way of the feed lines (A and B, see Col. 5, lines 12-25) to the first and second contact regions (see Fig. 6) and at whose output a control signal can be taken off, which is dependent on the electrical resistance of the shaped body.

McMillan et al. does not teach an actuating apparatus for operating a drive, steering or retardation means of a motor vehicle. Ju Sung Ho discloses an accelerator pedal control device for a vehicle (Abs). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the accelerator pedal in a vehicle, as shown by Ju Sung Ho, since McMillan does not claim an environment in which to use its pedal and using the pedal in a motor vehicle provides a way in which to control the acceleration in a motor vehicle as shown by Ju Sung Ho.

Claim 2, McMillan et al. in view of Ju Sung Ho discloses an actuating apparatus as set forth in claim 1 characterized in that the measurement transducer (control box not shown, see Col. 3, lines 46-52 and Col. 5, lines 12-25) has a voltage source (Ju Sung Ho, Fig. 1, BAT) which applies a substantially constant electrical voltage between the first and second contact regions, or that the measurement transducer includes a current source which produces a substantially constant current between the first and second electrical contact regions.

Claim 4, McMillan et al. in view of Ju Sung Ho discloses an actuating apparatus as set forth in claim 1 characterized in that the measurement transducer has an analog/digital converter (A/D converter circuit, Fig 2) which receives the analog parameter (input from VR1 or VR2) as an input signal and digitizes it.

Claim 5, McMillan et al. in view of Ju Sung Ho discloses an actuating apparatus as set forth in claim 1 characterized in that the measurement transducer has a function generator (MICOM, Fig. 2) which receives the analog or the digital parameter as an input signal and at whose output the control signal which is in an unequivocal functional relationship with the parameter can be taken off (see Page 5, lines 7-30).

Claim 6, McMillan et al. in view of Ju Sung Ho discloses an actuating apparatus as set forth in claim 5 characterized in that the function generator has a differentiation stage which receives the current parameter and the previous parameter called up from the memory as input signals and outputs at its output a differentiation value which represents a measurement in respect of the variation in time of the parameter (see Page 6, lines 14-28).

Claim 7, McMillan et al. in view of Ju Sung Ho discloses an actuating apparatus as set forth in claim 6 characterized in that the function generator forms a linearization member which receives the parameter or the differentiation value as an input signal and at its output there can be taken off a control signal which is in a linear relationship with the spacing or the change in the spacing between the two contact regions (see Page 6, lines 14-28).

Claim 8, McMillan et al. in view of Ju Sung Ho discloses an actuating apparatus as set forth in claim 6 characterized in that the function generator has a first threshold stage which receives the parameter as an input signal and at whose output a control signal can be taken off, which is of a first characteristic value when the parameter is greater than or equal to a predetermined parameter threshold value and which is of a second characteristic value when the parameter is less than the predetermined parameter threshold value (see Page 6, lines 14-28).

Claim 9, McMillan et al. in view of Ju Sung Ho discloses an actuating apparatus as set forth in claim 6 characterized in that the function generator has a second threshold stage (50) which receives the differentiation value as an input signal and at whose output a control signal can be taken off, which is of a constant first differentiation magnitude when the differentiation value is greater than or equal to a predetermined differentiation value threshold and which is of a second differentiation magnitude when the differentiation value is less than the predetermined differentiation value threshold (see Page 6, lines 14-28).

Claim 10, McMillan et al. in view of Ju Sung Ho an actuating apparatus as set forth in claim 6 characterized in that the function generator has a table memory in which there is associated with each digital value of the parameter and/or of the differentiation value a corresponding value of the control signal (maximum speed value stored therein, thus implying the use of a memory, see Page 7, lines 1-10).

Claim 12, McMillan et al. in view of Ju Sung Ho discloses an actuating apparatus as set forth in claim 1 characterized in that the shaped body is in the form of a

compressible shock-absorbing foot well lining which reduces its electrical resistance upon a compression in respect of volume (see foot pedal, Fig. 1 of Ju Sung Ho).

Claim 17, McMillan et al. in view of Ju Sung Ho discloses an actuating apparatus as set forth in claim 1 characterized in that the signal converter (26) is enclosed by an insulating material which is stiff in the region or regions (31, 31') of the first and/or second contact region (29, 29') so that a pressure exerted locally in the stiffened region is applied to the shaped body distributed uniformly over the stiffened region (31, 31'), and is yielding in the other regions (McMillan et al., Fig. 6).

Claim 18, McMillan et al. in view of Ju Sung Ho discloses an actuating apparatus as set forth in claim 1 characterized in that in a region (26) which is towards the person actuating the apparatus, the surface of the signal converter is provided with an increased coefficient of friction or a recess which is matched to the sole of the person operating the apparatus, so that same has a hold which is secured to prevent lateral displacement thereof (Ju Sung Ho, Figs 3 and 6).

Claim 21, McMillan et al. in view of Ju Sung Ho discloses an actuating apparatus as set forth in claim 1 characterized in that it is part of a group of a plurality of actuating apparatuses which are integrated into an overall shaped body, wherein the actuating surfaces of the three actuating apparatuses are disposed in mutually juxtaposed relationship operably in a surface of the overall shaped body in such a way that the actuating surface of the first actuating apparatus is arranged to the right, the actuating surface of the second actuating apparatus is arranged at the center and the actuating

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surface of the third actuating apparatus is arranged to the left (Ju Sung Ho, Figs 3 and 6).

Claim 22, McMillan et al. in view of Ju Sung Ho discloses an actuating apparatus as set forth in claim 21 characterized in that the actuating group is incorporated in a wall which separates the passenger compartment from the engine compartment, wherein the three actuating surfaces (25) face towards the driver (Ju Sung Ho, Figs 3 and 6).

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over McMillan et al. (US 4,639,710) in view of Ju, Sung Ho (WO 95/27237) further in view of Schemansky et al. (US 5,461,355).

Claim 3, McMillan et al. in view of Ju Sung Ho discloses an actuating apparatus as set forth in claim 1. McMillan et al. in view of Ju Sung Ho does not teach the measurement transducer includes an input amplifier which is connected at the input side to the feed lines. Schemansky et al. teaches the measurement transducer includes an input amplifier which is connected at the input side to the feed lines (amplifiers LT1014CN, Fig. 4, amplify the signals for the sensing circuit 13 of Fig. 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the amplifiers as shown by Schemansky since doing so allows for a low voltage signal to drive a high voltage motor.

Claims 11, 13, 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over McMillan et al. (US 4,639,710) in view of Ju, Sung Ho (WO 95/27237) further in view of Kimura et al. (JP 63318030 A).

14. McMillan et al. in view of Ju Sung Ho discloses an actuating apparatus as set forth in claim 1. McMillan et al. in view of Ju Sung Ho does not teach the shaped body has inclusions, in particular in the form of electrically conductive balls or hollow balls (70) which in particular are also compressible (see Fig. 6). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of McMillan et al. in view of Ju Sung Ho as disclosed by Kimura et al. since doing so prevents the pollution, abrasion, and corrosion of an operating unit caused by repetitive use, thus improving the merchandise value (see Constitution section of Abstract translation).

Claim 11, McMillan et al. in view of Ju Sung Ho further in view of Kimura et al. discloses an actuating apparatus as set forth in claim 14. wherein the elastic material is porous (conductive electric material 10, Constitution section of Abstract translation).

Claim 13, McMillan et al. in view of Ju Sung Ho further in view of Kimura et al. discloses an actuating apparatus characterized in that the shaped body (61) comprises a cellular polyurethane or a cellular vulkollan (conductive electric material 10, Constitution section of Abstract translation).

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Claims 15, 16, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over McMillan et al. (US 4,639,710) in view of Ju, Sung Ho (WO 95/27237) further in view of *VDO Cross-Section 4*, March 1981.

The features of claims 15, 16, and 20 are all functions performed by virtually any conventional electronic throttle or cruise control system as shown by *VDO Cross-Section 4*.

Allowable Subject Matter

Claim 19 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BERNARD ROJAS whose telephone number is (571)272-1998. The examiner can normally be reached on M and W-F, 10:00-7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin G. Enad can be reached on (571) 272-1990. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Elvin G Enad/

Supervisory Patent Examiner, Art Unit 2832

Br

/Bernard Rojas/

Examiner, Art Unit 2832